AMENDMENTS TO THE CLAIMS

1.(currently amended): An IP communications network system comprising:

a first QoS guaranteeing apparatus including:

a distinguishing unit for classifying, as target traffics, ~~in order to guarantee, based on a QoS guarantee protocol, a quality of a set of~~ specified data packets accordant with a specified condition among data packets transmitted from a multiplicity of data communications terminals;

an encapsulating unit for encapsulating the classified specified data packets defined as a QoS guarantee target on the basis of addresses of QoS guaranteeing apparatuses existing on the sides opposite to each other in a QoS guarantee target area in an IP packet switching network so that a set of the traffics appear as if being one session; and

a resource reserving unit for reserving resources in accordance with the QoS guarantee protocol with respect to the set of encapsulated specified data packets, and

a second QoS guaranteeing apparatus existing on the opposite side in the QoS guarantee target area, including:

a receiving unit for receiving the encapsulated specified data packets, which have been QoS-guaranteed, via the IP packet switching network; and

a de-capsulation unit for de-capsulating the encapsulated specified data packets received in order to forward these packets to an actual destination.

2.(currently amended): A QoS guaranteeing apparatus comprising:

a distinguishing unit for classifying, as target traffics, ~~in order to guarantee, based on a QoS guarantee protocol, a quality of a set of~~ specified data packets accordant with a

specified condition among data packets transmitted from a multiplicity of data communications terminals;

an encapsulating unit for encapsulating the classified specified data packets defined as a QoS guarantee target on the basis of addresses of QoS guaranteeing apparatuses existing on the sides opposite to each other in a QoS guarantee target area in an IP packet switching network so that a set of the traffics appear as if being one session; and

a resource reserving unit for reserving resources in accordance with the QoS guarantee protocol with respect to the set of encapsulated specified data packets.

3.(original): A QoS guaranteeing apparatus according to claim 2, further comprising:

a receiving unit for receiving the encapsulated specified data packets, which have been QoS-guaranteed, via the IP packet switching network; and

a de-capsulation unit for de-capsulating the encapsulated specified data packets received in order to forward these packets to an actual destination,

wherein the QoS guaranteeing apparatus faces to a QoS guaranteeing apparatus existing on the opposite side in the QoS guarantee target area.

4. (original): A QoS guaranteeing apparatus according to claim 2, wherein the QoS guarantee protocol is an RSVP protocol.

5. (original): A QoS guaranteeing apparatus according to claim 2, wherein the IP packet switching network is the Intranet.

6. (original): A QoS guaranteeing apparatus according to claim 2, wherein the IP packet switching network is constructed of a wide area network.

7. (original): A QoS guaranteeing apparatus according to claim 2, wherein the distinguishing unit classifies the target traffics by distinguishing the specified data packets on the basis of a destination address of each of the data packets transmitted from the multiplicity of data communications terminals.

8. (original): A QoS guaranteeing apparatus according to claim 2, wherein the distinguishing unit classifies the target traffics by distinguishing the specified data packets on the basis of a destination network address of each of the data packets transmitted from the multiplicity of data communications terminals.

9. (original): A QoS guaranteeing apparatus according to claim 2, wherein the distinguishing unit classifies the target traffics by distinguishing the specified data packets on the basis of a source address of each of the data packets transmitted from the multiplicity of data communications terminals.

10. (original): A QoS guaranteeing apparatus according to claim 2, wherein the distinguishing unit classifies the target traffics by distinguishing the specified data packets on the basis of a source network address of each of the data packets transmitted from the multiplicity of data communications terminals.

11. (original): A QoS guaranteeing apparatus according to claim 2, wherein the distinguishing unit classifies the target traffics by distinguishing the specified data packets on the basis of a destination port number of each of the data packets transmitted from the multiplicity of data communications terminals.

12. (original): A QoS guaranteeing apparatus according to claim 2, wherein the distinguishing unit classifies the target traffics by distinguishing the specified data packets on the basis of a receiving interface of each of the data packets transmitted from the multiplicity of data communications terminals.

13. (original): A QoS guaranteeing apparatus according to claim 2, wherein the encapsulating unit encapsulates the QoS guarantee target specified data packets with UDF/IP on the basis of addresses of interfaces of face-to-face apparatuses existing on the sides opposite to each other in the QoS guarantee area in the IP packet switching network so that the set of traffics appears as if being one session.

14. (original): A QoS guaranteeing apparatus according to claim 2, wherein the encapsulating unit encapsulates the QoS guarantee target specified data packets with TCP/IP on the basis of addresses of interfaces of face-to-face apparatuses existing on the sides opposite to each other in the QoS guarantee area in the IP packet switching network so that the set of traffics appears as if being one session.

15. (original): A QoS guaranteeing apparatus according to claim 2, further comprising:

a determining unit for determining the QoS guaranteeing apparatus serving as a destination and existing on the opposite side by examining a destination address of each of the specified data packets while referring to a storage unit for storing, if there are plurality of destinations of the set of the QoS guarantee target specified data packets, pairs of addresses of the QoS guaranteeing apparatuses existing on the opposite side in the QoS guarantee target area and destination addresses of the QoS guarantee target specified data packets while making these pairs of addresses corresponding to each other.

16. (original): A QoS guaranteeing apparatus according to claim 2, further comprising:

a determining unit for determining the QoS guaranteeing apparatus serving as a destination and existing on the opposite side by examining a destination network address of each of the specified data packets while referring to a storage unit for storing, if there are plurality of destinations of the set of the QoS guarantee target specified data packets, pairs of addresses of the QoS guaranteeing apparatuses existing on the opposite side in the QoS guarantee target area and network addresses of subnetworks connected to the respective QoS guaranteeing apparatuses on the opposite side while making these pairs of addresses corresponding to each other.

17. (original): A QoS guaranteeing apparatus according to claim 2, further comprising:

a determining unit for determining the QoS guaranteeing apparatus serving as a destination and existing on the opposite side by examining a destination port number of each of the QoS guarantee target specified data packets while referring to a storage unit for storing, if there are plurality of destinations of the set of the QoS guarantee target specified data packets, pairs of addresses of the QoS guaranteeing apparatuses existing on the opposite side in the QoS

guarantee target area and destination port numbers of the QoS guarantee target specified data packets while making these pairs of addresses and port numbers corresponding to each other.

18. (original): A QoS guaranteeing apparatus according to claim 2, further comprising:

a generating unit for monitoring a total data quantity of the QoS guarantee target traffic, then, if a transmission rate fluctuates, generating dummy data packets of which a quantity corresponds to a difference rate, and transmitting those dummy data packets in order to keep constant a total transmission rate of the QoS guarantee target traffic.

19. (original): A QoS guaranteeing apparatus according to claim 2, further comprising:

a changing unit for monitoring a total data quantity of the QoS guarantee target traffic and, if a transmission rate fluctuates, dynamically changing a resource reservation condition based on the QoS guarantee protocol.

20. (original): A QoS guaranteeing apparatus according to claim 2, further comprising:

a reservation canceling unit for monitoring the QoS guarantee target traffic, then, if the QoS guarantee target traffic is not received, starting up a timer, and, if the QoS guarantee target traffic is not again received until a period of time set in the timer expires, canceling the resource reservation based on the QoS guarantee protocol.

21. (original): A QoS guaranteeing apparatus according to claim 2, further comprising:

an executing unit for executing the resource reservation based on the QoS guarantee protocol within a predetermined time range with reference to a schedule timer.

22. (original): An IP communications network system according to claim 1, wherein functions possessed by the first and second QoS guaranteeing apparatuses are incorporated into other devices existing on network paths.

23. (original): An IP communications network system according to claim 1, wherein functions possessed by the first and second QoS guaranteeing apparatuses are incorporated into other devices which do not exist on network paths.